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60/040,155 7 M 08/873,597 12 . 08/873,978 12 . 08/899,510 24 . 08/911,085 14	US only): KAYYEM, ra Bonita Avenue, Pasae R, Stephen, D. [US/Usadena, CA 91106 (US). uth El Molino #33, Pasa gjun [CN/US]; 400 Ra	(81) Designated States: AL, AM, AT, ABY, CA, CH, CN, CU, CZ, DE, GH, HU, ID, IL, IS, JP, KE, KLR, LS, LT, LU, LV, MD, MG, NZ, PL, PT, RO, RU, SD, SE, SC, TT, UA, UG, US, UZ, VN, YU KE, LS, MW, SD, SZ, UG, ZW), BY, KG, KZ, MD, RU, TJ, TM), CH, DE, DK, ES, FI, FR, GB, PT, SE), OAPI patent (BF, BJ, CML, MR, NE, SN, TD, TG). Published With international search report. Before the expiration of the time lineard to be republished in the event of (88) Date of publication of the internation	DK, EE, ES, FI, GB, GE, G, KP, KR, KZ, LC, LK, MK, MN, MW, MX, NO, G, SI, SK, SL, TJ, TM, TR, ZW, ARIPO patent (GH, Eurasian patent (AM, AZ, European patent (AT, BE, GR, IE, IT, LU, MC, NL, CF, CG, CI, CM, GA, GN, the receipt of amendments.		

(54) Title: ELECTRODES LINKED VIA CONDUCTIVE OLIGOMERS TO NUCLEIC ACIDS

(57) Abstract

The invention relates to nucleic acids covalently coupled to electrodes via conductive oligomers. More particularly, the invention is directed to the site-selective modification of nucleic acids with electron transfer moieties and electrodes to produce a new class of biomaterials, and to methods of making and using them.

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Inte Ional Application No PCT/US 97/20014

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C07H21/00 C12Q1/68 C07H23/00 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) C07H C120 IPC 6 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. WO 95 15971 A (CALIFORNIA INST OF TECHN) 1-29 15 June 1995 cited in the application see claims 1-20; figures 1-4; examples 1-7 R.P.HSUNG ET AL.: "Synthesis and 1-29 CHaracterization of Unsymmetric Ferrocene-Terminated Phenylethynyl Oligomers." ORGANOMETALLICS, vol. 14, no. 10, 1995, pages 4808-4815, XP002077968 cited in the application see the whole document WO 93 10267 A (IGEN INC) 27 May 1993 1-29 see abstract; claim 1 Further documents are listed in the continuation of box C. Patent family members are listed in annex. * Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not cited to understand the principle or theory underlying the considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to "L" document which may throw doubts on priority claim(s) or involve an inventive step when the document is taken alone which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the "O" document referring to an oral disclosure, use, exhibition or document is combined with one or more other such docuother means ments, such combination being obvious to a person skilled in the art. "P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of theinternational search Date of mailing of the international search report 18 September 1998 01/10/1998 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Scott, J Fax: (+31-70) 340-3016

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